

What is Claimed is:

1. A software package comprising:

a source identifying module for determining source data corresponding to a source of incoming telephone calls;

a call handling module including instructions for each of a plurality of call handling modes;

a handling mode selection module determining which call handling mode controls handling of an incoming call based on the source data and a time of receipt of the incoming call.

2. The software package according to claim 1, further comprising a call recipient preferences module storing call recipient input indicating a call handling mode to be applied to incoming calls based on the source data.

3. The software package according to claim 2, wherein the source data indicates a telephone number from which a corresponding incoming call originated and wherein the call recipient preferences module stores at least one telephone number along with a corresponding schedule indicating the call handling mode to be applied to incoming calls originating from the at least one telephone number based on one of a time and a day when a corresponding incoming call is received.

4. The software package according to claim 1, wherein the call handling modes include a first call handling mode in which the telephone provides an audible indication of incoming calls and a second call handling mode in which the telephone provides an inaudible indication of incoming calls.

5. The software package according to claim 4, wherein the first call handling mode includes a plurality of sub call handling modes with each of the sub call handling modes providing a corresponding audibly distinct indication of incoming calls.

6. The software package according to claim 1, wherein a first one of the call handling modes includes a first sub call handling mode which operates when a call recipient is currently engaged in a call wherein, when operating under the first sub call handling mode, the telephone provides to a call recipient an indication of a second incoming call.

7. The software package according to claim 4, wherein the call handling modes further include a third call handling mode in which incoming calls are transferred directly to a voice mail system without providing notification of the incoming call to the user.

8. The software package according to claim 1, further comprising a code detection mode for detecting input by a caller of a predetermined code, wherein, when the predetermined code is detected by the code detection module, the handling mode selection module is directed to select a call handling mode based on the detected code.

9. The software package according to claim 3, wherein the call recipient preferences module stores a plurality of telephone numbers organized into a plurality of groups along with a corresponding schedule for each of the groups, the schedules indicating the call handling modes to be applied to incoming calls from each of the groups depending on the time of receipt of the incoming calls.

10. The software package according to claim 9, wherein the call recipient preferences module indicates the predefined call handling mode to be applied to any incoming call including a predetermined sequence of digits.

11. A method of controlling operation of a telephone comprising the steps of:

extracting from an incoming call source data corresponding to a source of the call;

specifying a set of call handling instructions for each of a plurality of call handling modes;

selecting one of the call handling modes for each incoming call received based on the source data and a time of receipt of the incoming call.

12. The method according to claim 11, further comprising the step of storing call recipient input indicating a call handling mode to be applied to incoming calls based on the source data.

13. The method according to claim 12, wherein the step of storing call recipient input indicating a call handling mode to be applied to incoming calls based on the source data further includes the sub-step of storing call recipient input indicating a time schedule changing the call handling mode to be applied to incoming calls based on the time of receipt of the incoming calls.

14. The method according to claim 13, wherein the call recipient input indicating a time schedule controlling the call handling mode to be applied to incoming calls based on the time of receipt of the incoming call includes data corresponding to a day of receipt of the incoming calls.

15. The method according to claim 12, wherein the source data indicates a number from which a corresponding incoming call originated and wherein the call recipient input includes a sequence of numbers along with a corresponding schedule indicating the call handling mode to be applied to

incoming calls including the sequence of numbers based on one of a time and a day when a corresponding incoming call is received.

16. The method according to claim 11, wherein the plurality of call handling modes includes a first call handling mode in which the telephone provides an audible indication of incoming calls and a second call handling mode in which the telephone provides an inaudible indication of incoming calls.

17. The method according to claim 16, wherein the first call handling mode includes a plurality of sub call handling modes with each of the sub call handling modes providing a corresponding audibly distinct indication of incoming calls.

18. The method according to claim 11, wherein a first one of the call handling modes includes a plurality of sub call handling modes, with a first sub call handling mode operating only when an incoming call is received while a call recipient is currently engaged in a call and a second sub call handling mode that operates only when an incoming call is received while a call recipient is not engaged in a call.

19. The method according to claim 16, wherein the call handling modes further include a third call handling mode in which incoming calls are transferred directly to a voice mail system without notification to a user.

20. The method according to claim 16, further comprising the steps of comparing input from a caller to a predetermined code and controlling selection of the call handling mode based on the comparison.

21. The method according to claim 15, wherein the call recipient input includes a plurality of sequences of numbers organized into a plurality of groups along with a corresponding schedule for each

of the groups, the schedules indicating the call handling modes to be applied to incoming calls from each of the groups depending on the time of receipt of the incoming calls.

22. The method according to claim 11, wherein the call handling mode is selected based on a comparison of a predetermined sequence of digits to the source data, wherein the predetermined sequence of digits represents a part of a telephone number.

23. A telephone system comprising:

a source notification device, providing an indication to a call recipient of a source of each of a plurality of incoming calls;

a memory including operating code for controlling operation of the system, the operating code including a plurality of call handling modes which may be applied to incoming calls, and storing call recipient input indicating a corresponding one of the plurality of call handling modes to be applied to an incoming call based on the source data and a time of receipt of the incoming call.

24. The telephone system according to claim 23, further comprising a voice mail system, wherein under a first one of the plurality of call handling modes, corresponding incoming calls are forwarded directly to the voice mail system.

25. The telephone system according to claim 23, further comprising a call waiting system which handles incoming calls received while a call recipient is engaged on a call, wherein, the call handling modes control operation of the call waiting system based on the source data and the time of receipt of the incoming call.

26. The telephone system according to claim 23, wherein the source data indicates a telephone number from which a corresponding incoming call originated and wherein the call recipient input includes at least one telephone number along with a corresponding schedule indicating the call handling mode to be applied to incoming calls received from the at least one telephone number based on one of a time and a day of receipt of the incoming calls.

27. The telephone system according to claim 23, wherein a first call handling mode includes a plurality of sub call handling modes with each of the sub call handling modes providing a corresponding audibly distinct indication of incoming calls.

28. The telephone system according to claim 27, wherein, when a call recipient is currently engaged in a call and an incoming call is received, the sub call handling modes provide an audibly distinct indication of the incoming call based on the source data and the time of receipt of the incoming call.

29. The telephone system according to claim 27, wherein the call handling modes further include a third call handling mode in which corresponding calls are transferred directly to a voice mail system without notification to the user.

30. The telephone system according to claim 23, wherein the call recipient input includes a plurality of telephone numbers organized into a plurality of groups along with a corresponding schedule for each of the groups, the schedules indicating the call handling modes to be applied to incoming calls from each of the groups depending on the time of receipt of the incoming calls.